An Inaugural Dissertation
On the
Influence of the Passions
On the
Human System.

Submitted to the Examination
of the
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The
Trustees and Medical Faculty
of the
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For the
Degree
of
Doctor of Medicine.

By
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Pennsylvania.

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Preface.

Although I am very sensible, that on a perusal of this Essay, it will be found to be fraught with numerous imperfections: yet, knowing the genius and judgment — and consequent liberality of sentiment, of those gentlemen, to whose examination it is most respectfully submitted, I hope to claim a share of their indulgence, and confidently trust, that due allowance will be extended for my inexperience.

Notwithstanding I have attempted to speak of the application of mental remedies to practice; yet I would not on any account wish to be understood to entertain an exclusive confidence in those powerful agents. On the contrary it is evident, that when treating particular diseases, it will not only be proper, but absolutely necessary, that other remedies,

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according to circumstances, should, at the same time, be brought in to our aid.

But that the passions exercise a most powerful influence over the body, I think is sufficiently obvious. And they therefore justly merit a share of the serious attention of every judicious practitioner.

In viewing the influence of the passions upon the human system, an unbounded theme is unfolded to our view, for investigation. — And it is with peculiar diffidence, that I attempt to enter, at this time, upon the consideration of this very interesting, and most sublime subject. —

Notwithstanding its vast importance, I believe it to be a subject, that is too generally neglected, or overlooked, by very many of the medical profession.

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whose paternal care is so conspicuous throughout all his works, has seen proper to reserve some subjects within his sacred arcana; — yet, in his infinite wisdom, he has condescended to endow man with a capacity to acquire knowledge, and with judgment to apply it. — Hence, the more he becomes conversant with subordinate causes and their consequences, the more is he qualified for extensive usefulness among his fellows. And probably no class in society have greater occasion to direct their attention to the investigation of this subject, than the practitioners of the healing art. ———

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Passions.

It is universally acknowledged, and sufficiently demonstrated, that the most intimate connexion and mutual dependence exist between mind and matter, which nothing but the mortal pang of death can dissolve.

To trace the effects of corporeal derangement on the constitution of the mind, or the faculties of the soul, is foreign from my present purpose — these are the subjects of daily and melancholy observation. But the influence of the passions upon the human system, is the subject which now more immediately claims our attention.

Plato was so struck with the effects of the passions upon the body, that he imagined, all diseases of the body proceeded from the soul.

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In the term passions, I include the whole range of mental emotions, from the most placid meditation, up to a paroxysm of rage or ecstacy on the one hand, and down to an abyss of despair on the other.

These various emotions are said to stimulate, to depress, to tranquilize, and to ruffle the soul: but what is more consistent with the present subject is — they produce similar effects upon the body — instances of which are the product of every moment's observation, in a greater or less degree.

The nervous and vascular systems are continually under the influence of the mental emotions. For example, who has not experienced sudden palpitations and tremors, upon hearing the postman's rap, when he was in anxious expecta

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tion of receiving some important intelligence? Not unfrequently we observe individuals scarcely able to break the seal of important letters — merely through nervous agitation, as the effect of the present emotion, producing palpitation of the heart &c.

But it is not the heart and large vessels alone, on which the passions produce their effects. Their influence is extended even to the minutest capillaries. — For instance, allow the idea of shame to cross the imagination of sensibility, and how instantaneously are the capillaries of the whole face reddened and gorged with blood. — Permit the emotion to be changed to fear, and almost as instantaneously do we observe the same vessels, blanched and bloodless — indicated by a pallid countenance.

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Certain passions of the mind are known invariably to cause an accumulation of blood in particular parts of the body, and in those parts only when they are excited.

The passions are represented as being the active forces of the soul. They are its highest powers brought into movement and exertion. They are not inaptly compared to wind and fire, which are instrumental in carrying on many of the beneficent operations of nature. But when they rise to undue violence, or deviate from their proper course, their path is uniformly marked with ruin and devastation. So in like manner are the passions, to the body, either useful or destructive, according to their direction, or degree of violence.

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The passions become sources of disease, only as they are deranged, or morbidly excited. They appear to be of two kinds, viz. such as increase the force of the heart and arteries, and are consequently stimulant. And such as debilitate or depress them - producing a sedative effect.

Those which are most subject to derangement or to a morbid excess, probably are - Love. Joy. Grief. Fear. and Anger - which I shall consider in order, and then proceed to notice some of the most prominent effects resulting from the morbid condition of various other passions or emotions of the mind, which are so fertile in the production of deleterious consequences upon the human system.

In order to illustrate the foregoing positions, it will be necessary for me

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to exhibit such facts as I have been able to collect from the writings of various authors, and from the testimony of a few individuals of undoubted veracity, together with some of the most important of my own very limited observations &c.

Love is perhaps the most powerful passion that pervades the human mind, and when successful, it is certainly a most grateful and stimulating passion. When founded upon correct and virtuous principles, it is not only conducive to health of body, but contributes greatly to the happiness of every society into which it is introduced. But when disappointed in its object — when all proffered attention is treated with neglect — if it be deeply rooted, it leaves a corroding sting behind, and generally terminates in those diseases which are incident to grief.

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Instances almost without number might be enumerated, in order to illustrate the devastating influence of this passion upon the human system. But as it is evident, that, to enter fully into the disquisition and merits of so important a subject as that of love, would necessarily swell the dissertation far beyond proper limits, I shall purposely avoid prosecuting it to any extent.

This passion, although implanted in the human breast, by a beneficent Creator, for wise and good purposes; yet, in its morbid and irresistible career, it has even been asserted to have indirectly destroyed more victims than the conqueror's sword, or martial weapons have ever slain.

The investigation of this subject, says the celebrated Dr. James Johnson,

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cannot be publicly conducted. But it may be privately prosecuted by the medical philosopher. And, though a path but little explored it will be found to lead to most important conclusions, in the development and treatment, of many obscure and anomalous diseases.

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Joy is a highly pleasurable and stimulating passion — and when moderately excited, very greatly conduces to health of body — causing the circulation of all the fluids to be more vigorous and uniform — preventing the formation of disease, and facilitating the cure of such as are formed. But when carried to excess — and more particularly where it very suddenly succeeds to extreme grief, it

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not unfrequently produces dangerous, and even fatal consequences. —

Thus we are informed that Pope Leo the Tenth died of a fever occasioned by the agitation of his spirits, on the reception of the joyful news of the capture of Milan, concerning which he had entertained much anxiety. Cogan on the passions. p. 364.

The door keeper to the house of congress was so overjoyed, on hearing the news of the capture of lord Cornwallis and his army, during the American revolutionary war, that he died suddenly with an apoplexy.

We learn likewise, that the son of the famous Leibnitz died of joy upon opening an old chest, and very unexpectedly finding in it a large quantity of gold. And moreover, that several persons died from the same

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cause, on witnessing the restoration of Charles the second to the British throne.

See Rush on the mind.

If we have anticipated any joyful event, the system becomes gradually prepared to sustain the emotions connected with it — so we ought uniformly to endeavour to fortify ourselves with the necessary share of firmness, in order with impunity, to meet joyful, as well as disastrous tidings.

I have already intimated that joy facilitates the cure of diseases. Thus, Dr. Harris - Surgeon of our navy, informs us in his lectures, that the wounds of soldiers, whose companions have been victorious, uniformly heal much more readily than when they have been defeated — and vice versa. —

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A person labouring under gout, who, for some offence was condemned to lose his head; as he was carried out to be executed, received the most unexpected news of his pardon — which had so remarkable an effect upon him, that although he was quite exhausted with pain, and had lost the use of every limb; yet he got up on his legs immediately, and walked with remarkable quickness and agility. And he lived many years after, without the least touch of the disorder. Van Swieten, Vol. xiii. p. 38.

Laughter seems in some measure to be connected with joy, and when excessive, sometimes produces rupture of a blood vessel, either in the lungs, spleen or brain. Dr. Rush saw a case of haemoptysis induced by it, which had a fatal issue. He relates two other cases

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where it produced sudden death.

A similar instance is related by Dr. Ewell, of a comic poet, who, beholding an ass eating some figs that a boy had laid down. When the boy returned, 'Go now,' said the poet, 'and fetch the ass some drink'. The old man was so tickled with the fancy of his own jest, that he died laughing.

When excessive laughter is not attended with these fatal consequences, it is succeeded by pain in the left side, hiccough, and low spirits.

A sudden fit of laughter is sometimes attended with the most happy results. Thus we are told by Dr. Ewell, that a Mr. Askew was afflicted with a most alarming imposthumation, of which he was on the very point of suffocation. A monkey who was present, laid hold of his

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master's wig, and with his gold headed cane, made him a low bow, and began to walk about the room as a man of great consequence. The stately stepping and self assumed dignity of Jacko, so tickled the fancy of Mr. Askew, as to excite an immoderate fit of laughter. The imposthumation burst — the purulent matter was thrown up. And, to the great astonishment of all his attendants, Mr. Askew perfectly recovered his health.

Grief like a poison corrodes the powers of the mind and body — enfeebles the whole nervous system — diminishes the circulation — impairs the appetite and digestion — from whence arise obstructions, and other distressing complaints. Dr. Rush tells us

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it produces insensibility, syncope, asphyxia apoplexy, fever, dyspepsia, hypochondriasis, catalepsy, mania, and death.

Tears are the anodynes of grief, and ought not therefore to be restrained. They have a tendency to prevent the danger to be apprehended from grief, by diminishing the spasmodic motions in the breast and head; and by restoring regularity in respiration, as well as in the circulation of the blood.

A gentleman after long and excessive grief became cachectic, face livid and yellowish - appetite and strength greatly depressed - belly bound, with extreme uneasiness from flatulence - breathing difficult, with an anxiety of the præcordia to such a degree that at times he seemed ready to expire - pulse weak, and for the most part unequal, and sometimes inter-

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mitting. At length an icteritious colour of the face supervened, with an increase of the oppression at the breast, and a swelling of the feet, which arose at times to the thighs and scrotum. Medicines were resorted to, but the disorder grew worse, and the patient died. Duncans Hoffman Vol. ii. p. 392.

When the Turks came to raise the seige of Buda, there was among the German captains a nobleman, whose son fell in battle, while gallantly fighting the enemy. His companions all admired his bravery, and were much grieved at seeing him fall. While they were examining him, the old nobleman, not knowing it was his son, came running to see who it was. On recognising his son, he grew suddenly stiff, with his eyes open, and fell dead. Van Swieten, vol. x. p. 250.

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Dr. Johnson mentions the case of Philip the Fifth of Spain, who died suddenly on learning the disastrous defeat of his army near Plaisance. And Zimmerman states, that on opening his body, the heart was found burst, which proves that the vulgar and metaphorical expression of a 'broken heart' is sometimes pathologically correct.

A very remarkable instance of the influence of horror, is particularly described by Dr. Johnson, as having occurred at the Hospital de la Salpetriere in Paris, in the person of Mary Glin, a widow, seventy years of age, who had enjoyed remarkably good health all her life. She was so astounded with horror, on learning that her daughter, with two children in her arms, had thrown herself out of a window, and was dashed

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to pieces, that in one night, her skin, from head to foot, became as black as that of a negro. This blackness was permanent. And the woman having died about two years afterwards of pulmonic inflammation at the hospital above mentioned, she was dissected by the surgeons of the Institution, and the skin was found to correspond in structure with that of the negro.

Fear, says Dr. Ewell, was placed in man as a sentinel for self preservation. But like every other passion, the excess of it is pernicious, and sometimes fatal.

We are told by Dr. Rush that it produces tremors, palpitations, globus hystericus, diarrhoea, aphonia, fever, convulsions, syncope, mania, epilepsy, asphyxia, and death. In addition to these

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general effects of fear, it appears sometimes to act in a peculiar manner upon the hair of the head. First, in changing it to a gray or white colour. And second, in causing it to fall off the head – leaving it completely bare. An instance of this was communicated to Dr. Rush by a Dr. Hluch, who informed him that he knew a case of it in a gentleman who was in Lisbon at the time of the great earth quake there in the year 1755.

A young Spaniard, who for a capital offence was condemned to die, was so terrified at hearing his sentence, that in one night he became gray as in old age. He was pardoned by king Ferdinand, who said he had been sufficiently punished for his fault, seeing he had exchanged the flower of his youth, for the hoary hairs of age. Cwell's Medical Companion. p. 128.

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An instance of diarrhoea from fear occurred a few weeks since at the Pennsylvania Hospital, in an old soldier who came into the operating room with a dislocated humerus. On seeing a splendid display of instruments &c. which he erroneously imagined were intended for him, he was so overcome with fear, as scarcely to be able to stand, and immediately complained of griping in his bowels, which was soon followed by a diarrhoea.

I am acquainted with a very respectable lady in Philadelphia, who uniformly faints, and generally vomits, upon seeing certain animals. A few months ago she accidentally saw a toad hop immediately before her. She instantly ejected the contents of the stomach, and fainted; in which state

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she remained about twenty minutes, and was afterwards so completely nervous as not to be able to desert her bed for two weeks.

We find an instance related by Dr. Rush, of a soldier in whom fear produced not only fever, but a mortification from a blister, which terminated his life.

It is related in Crichton Vol. ii. p. 262. that some girls went out to see a person who had been executed and hung in chains. One of them threw several stones at the gibbet, and at last struck the body with such violence as to make it move — at which she was so much terrified, as to imagine the dead person was alive, and had come down from the gibbet, and was running after her. She hastened home, and not being able to conquer the idea, died in convulsions.

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Van Swieten vol. x. p. 332, details an account of a boy being so frightened by a large dog jumping upon him, that soon after he fell down epileptic. And afterwards on seeing a large dog, or even hearing him bark, the paroxysm uniformly returned.

I am informed by an eminent physician in Philadelphia of a case of epilepsy induced by fright, which terminated in death in a few days.

It appears that epilepsy may be induced by merely beholding another in that disease. Thus we have a particular account of a person in an hospital falling down in an epileptic fit in the sight of the other patients, the effect of which was so strong, that numbers of them became immediately affected in the same manner, and their paroxysms con-

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tinued, and were repeated at the sight of one another in that state. The opinion of the celebrated Dr. Boerhaave was requested on this occasion. He judiciously reflected, that these affections were originally produced by impressions made upon the mind, and that the most proper means of cure would be, to eradicate these impressions, by others still more powerful. With this view he directed actual cauteries to be prepared, and kept in readiness to be applied to the person who should next be affected. The consequence was, that not one was afterwards affected. Falconer on the passions p. 100.

I have also been informed that the late Dr. Hutchinson saw six patients in the Pennsylvania Hospital affected with convulsions in consequence of beholding one of the patients fall down in a fit.

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It is related that one of the captives, who was taken by the Turks, with admiral Middleton, thinking the admiral was about to lose his head, when he saw him so rudely presented to the Bashaw, fell into a swoon, and soon after died from mere apprehension. Mavor's Collection. Vol. ii. p. 164.

Dr. Johnson quotes, from Ludovicus Vives, lib. 3. de Anima, a case of a jew in France, who came by chance over a dangerous passage or plank that lay over a brook, in the dark without harm. The next day, on viewing the perilous situation he had been in the preceding night, he fell down dead.

The same author informs us from Corvisart, that diseases of the heart were extremely common in the times of the French revolution, when the minds of all classes were enveloped in a constant state of agitation and alarm. Johnson on the Liver.

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Fear, or some of it's modifications, seems capable sometimes of producing surprising phenomena in the removal of the most obstinate diseases. Thus we are told that, a man disguised in the form of a frightful spectre, seized another who was suffering under a paroxysm of gout — dragged him down stairs, with the gouty feet trailing along the ground — paying no regard to his terrible cries — and at last left him on the cold earth to shift for himself. The gouty patient, who before could not stir a limb, finding himself deserted by the supposed ghost, started on his legs and sprang up stairs with infinite agility, and opening the window of the chamber, alarmed all the neighbourhood with his noise. However he got well, and never afterwards had a symptom of gout. Van Swieten. Vol. xiii. p. 38.

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A letter from Dr. Sharp of Kentucky to Dr. Rush, gives a detailed account of a girl afflicted with rheumatism, who had not walked for more than two years. The family lived up one pair of stairs. A circumstance occurred one evening which alarmed the family so that they all fled down stairs. The girl not willing to be left alone, and in her fright forgetting her complaint, fled also. She never afterwards had a symptom of rheumatism. Med. Mus. Vol. i. no iii. p. 292.

A boy having by mistake taken a quantity of poison by which he was thrown into extreme agony, rushed into the kitchen in search of water. His dying mother, roused by the mournful cry "I am poisoned I am poisoned", got out of bed, and coming down stairs, found her son, now faint; and not conscious of her own ills, tried to

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soothe those of her son; and, though for several years she had laboured in the most dreadful manner under asthma, and a nervous affection, she no longer felt either; and from that time for upwards of two years she remained in perfect health.

European Magazine Vol. XXXIV. p. 4.

Fear is known sometimes suddenly to arrest pain, as in tooth ache, parturition &c. I have frequently known patients to labour under the most excruciating tooth ache, and instantly, upon the appearance of the dentist, all the pain vanished. I presume every accoucheur has witnessed occasionally a total suspension of labour pain upon his first appearance in the room. Professor Dewees gives an instance of labour pain being suspended for two weeks in con-

sequence of his presence in the room. Most probably in these instances, the active agent is fear combined with a sense of delicacy &c. But as these agents lose their influence, nature again resumes her task, and the process continues.

There is no doubt that fear of pain has very considerable influence in muscular contraction in the act of parturition, and in our attempts to reduce dislocations &c. Remove this from the mind, or abstract the mind itself for a moment, and we remove the greatest obstacle with which we have to contend during the process.

I was happy to find this idea supported by the observations of Professor Gibson a few days since, in his excellent lectures on dislocations &c.

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Anger, of all passions is the most unreasonable, and directly perhaps the most destructive in its effects upon the system. It produces a preternatural determination of blood to the head, an increased discharge of saliva, unusual bodily strength, convulsions, hysteria, apoplexy, and death. Sometimes it produces paleness, tremors, sickness at stomach, vomiting, quick respiration, syncope, and asphyxia. In this instance it is probably combined with fear, which may account for the abstraction of blood from the head, and its determination to other parts of the body.

From a knowledge of its deleterious effects upon the stomach, heart, and liver, Dr. Johnson cautions every person who has the least tendency to complaints of these important organs, to be incessantly on

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